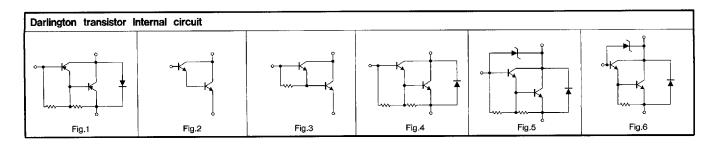
Transistors ___

TO-92L · TO-92LS · MRT

TO-92L is a high power version of TO-92 and TO-92LS is a slimmed TO-92L. MRT is a 1.2W package power taped transistor designed for use with an automatic placement machine.

	Package						Pc (W) (Ta=25°C)			****				
Application	TO-92L	TO-92LS Part No.	MRT	V _{CEO} (V) *V _{CES}	IC (A)	ic Max.	TO-92L	TO-92LS	MRT	h _{FE}	h _{FE} Ranking code	V _{CE} (V)	lc (mA)	Internal circuit
Low Noise	_	2SA1819	_	-150	-0.05	-	_	0.8	-	120~390	QR	-6	-2	-
	_	2SC4720		-150	0.05	-	_	0.8		120~390	QR	6	2	-
Driver	2SA934	2SA1818	2SB1329	-32	-1	-2	0.75	0.9	1.2	82~390	PQR	-3	-100	-
	2SA935	2SA1902	2\$B1330	-80	-0.7	_	0.75	0.9	1.2	82~390	PQR	-3	-100	-
	2SB1010	2SB1595	2\$B1331	-32	-2	-3	0.75	0.9	1.2	82~390	PQR	-3	-500	-
	2SB1041	_	2SB1332	-80	-1	-	0.9	_	1.2	82~390	PQR	-3	-100	-
	2SB1043		_	50	-1		0.9	-	_	82~390	PQR	-3	-100	_
	2\$B1212	2SB1596	2SB1328	-160	-1.5	_	0.9	0.9	1.2	56~270	NPQ	-5	-100	-
	2SB1425	_	_	-20	-2	-3	1.0	-		270~1200	SEU	-6	-500	_
	-		2SB1517	-50	-3		_	-	1.2	56~390	NPQR	-3	-500	-
	2SC2060	2SC4719	2SD2005	32	1	2	0.75	0.9	1.2	82~390	PQR	3	100	-
	2SC2061	2SC5061	2SD2006	80	0.7	1	0.75	0.9	1.2	82~390	PQR	3	100	-
	2SD1292	-	2SD2008	80	1	2	0.9	-	1.2	82~390	PQR	3	500	_
	2SD1384	2SD2450	2SD2007	32	2	2.5	0.75	0.9	1.2	82~390	PQR	3	500	_
	2SD1812	2SD2451	2SD2004	160	1.5	-	0.9	0.9	1.2	56~270	NPQ	5	100	_
	_	_	2SD2146	50	3	_	-	-	1.2	56~390	NPQR	3	500	_
Low V _{CE} (sat)	_	2SA1903	_	-20	-3	_	-	0.9	_	82~390	PQR	-2	-100	-
	2SB1374	2\$A1820	-	-50	-2	-5	1.0	0.9	_	82~270	PQ	-2	-500	-
	_	2\$C5062	_	20	3	_	-	0.9	-	120~560	QRS	2	100	-
	2SD2069	2SC4721	-	50	2	5	1.0	0.9	-	82~270	PQ	2	500	-
Strobo Flash	2SB1306	_	2SB1482	-20	-5	-10	1.2	-	1.2	82~390	PQR	-2	-500	-
Low V _{CE} (sat)	2SD1961	_	_	20	5	10	1.2	-	-	120~560	QRS	2	500	-
Chroma	2SC3269	2SC4722	2SC4243	300	0.1	-	0.75	0.9	1.0	39~180	MNP	10	10	_
	2SB1425		2SB1461	-20	-2	-3	1.0	-	1.2	270~820	SE	-6	-500	
High h _{FE}	2SD2159	_	_	25	2	3	1.0	-	-	390~2700	EUVW	6	500	-
High h _{FE} High V _{EBO}	2SD2172	_	_	25	1.2	2	1	-	_	560~2700	υvw	5	500	-
Darlington	2SB1256	_	2SB1333	-100	-2	_	1.2	-	1.2	1k~10k		-2	-1000	Fig.1
	_	-	2SB1515	-80	-4	-	_		1.2	1k~10k	-	-3	-2000	Fig.1
	_	-	2SD2452	31±4	2	3	<u> </u>	-	1.2	1k~10k	_	2	1000	Fig.5
	2SD1809	-	2SD2009	60*	1	_	0.9	-	1.2	2k~	_	3	500	Fig.2
	2SD1929	-	2SD2010	60±10	2	_	1.2	_	1.2	1k~10k	_	2	1000	Fig.5
	2SD1930	-	2SD2011	100	2	-	1.2	_	1.2	1k~10k		2	1000	Fig.4
	-	_	☆2SC4724	100	3	5	-	_	1.2	2k~10k	_	2	1500	Fig.4
	2SD1931	_	_	60±10	1.5		0.9		_	1k~30k	-	2	1000	Fig.6
	_	_	2SD2308	80	4	_	-	_	1.2	1k~10k		3	2000	Fig.4
	_	_	2SD2309	60	4		_	_	1.2	1k~10k	_	3	2000	Fig.3
Darlington Driver	_	_	2SD2388	90 + 20	2	3	-	_	1.2	1k~10k	_	2	1000	Fig.5
High Voltage	2SA1584	_	_	-400	-0.1	-0.2	0.9	_	1 -	56~270	NPQ	-10	-10) –
	2SA1780	2SA1884	2SA1809	-400	-0.5	-1	0.9	0.9	1.2	56~270	NPQ	-5	-50	- lo
	2SA1760	_	-	400	-0.1	-0.2	0.9	_	_	56~270	NPQ	-10	-10	-
							+		1	-	1	1		\neg
SW	_		2SA1861	-400	-2	-4	-	_	1.2	56~180	NP	-5	-100) -

Note: ☆Under development

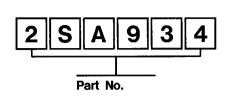


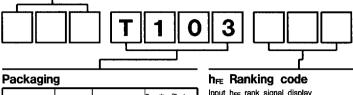
Product Designation

- · When ordering, specify the type.
- · Check each code against the tables shown below.
- · Fill a space with the next character.

Special code

Ornit for standard product.
 Factory assigned for custom product.





2,000

Packaging	9				
Package	Code	Package specifications	Quantity / Package (pcs)		
TO-92L	T103	Ammo box	2,500		
10-92L	None	Bulk	500		
TO-92LS	TE4	Ammo box	3,000		
10-9263	None	Bulk	1,000		

Ammo box

T105

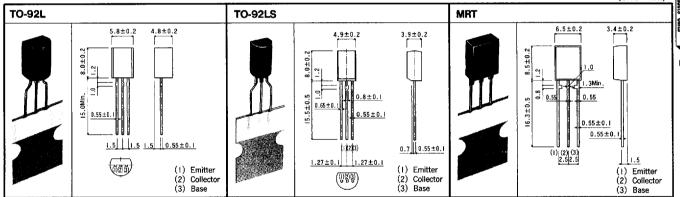
Input h_{FE} rank signal display

One rank prefered P P Multiple rank prefered P P R

(Min., Max. is displayed)

h _{FE} Range	Code	h _{FE} Range		
27~56	E	390~820		
39~82	U	560~1200		
56~120	V	820~1800		
82~180	w	1200~2700		
120~270	А	1k~		
180~390	В	5k~		
270~560	С	10k~		
	27~56 39~82 56~120 82~180 120~270 180~390	27~56 E 39~82 U 56~120 V 82~180 W 120~270 A 180~390 B		

(Unit: mm)



Magazine taping of TO-92L and TO-92LS ; lead formed as shown below.

Packaging Specifications

(Unit:mm)

